

### Claims

1. Method of fabricating an optical fiber comprising a silica-based glassy material, wherein deuterium is injected in a fiber drawing device.
2. Method according to claim 1, wherein the deuterium is injected as part of a gas mixture.
3. Method according to claim 1, wherein the deuterium is contained in an atmosphere of inert and/or appropriate protective gases, in particular a nitrogen, helium or CO<sub>2</sub> atmosphere.
4. Method according to claim 3, wherein the helium atmosphere contains about 1% deuterium.
5. Method according to claim 1, wherein deuterium is introduced into the fiber drawing device before and/or after drawing the optical fiber.
6. Fiber drawing device for drawing an optical fiber from a preform, wherein the fiber drawing device comprises an inlet for supplying deuterium to the chamber of the fiber drawing device.
7. Transport container for transporting a fiber drawn according to claim 1, wherein the transport container contains deuterium.